Amendments to the Specification:

Please insert the following headings before the first paragraph on page 1:

BACKGROUND OF THE INVENTION

TECHNICAL FIELD OF THE INVENTION

Please insert the following heading before the second full paragraph on page 1:

PRIOR ART

Please insert the following heading before the fourth full paragraph on page 3:

OBJECT AND SUMMARY OF THE INVENTION

Please insert the following heading before the third full paragraph on page 6:

BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following heading before the first paragraph on page 7:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS OF THE INVENTION

Please replace the third paragraph on page 7 with the following amended paragraph:

Attached to the inner wall of the rotor 20 there is at the inlet end a set of rotatable blades or shovels 24 forming an inlet ~~shovel~~ bladed wheel 26 and at the outlet end of the pump there is a second set of blades or shovels 32

forming an outlet turbine wheel 30. Between the ~~shovel~~ <u>bladed</u>
wheel 26 and the turbine wheel 30 the degassing body of the
rotor 20 is formed as a substantially cylindrical drum 34. The
drum 34 may also have a more or less conical design with a
larger diameter at the outlet end. The drum wall is preferably
smooth, i. e. it lacks any blades or ridges other than the
shovels at the inlet end 22.

Please replace the fifth paragraph on page 7 with
the following amended paragraph:

At the center of the rotor 20 there is a stationary gas
exhaust pipe 36 having on its outer periphery an annular inlet
throttle plate 38 slideable along the exhaust pipe (by means
not shown). The throttle plate 38 is adapted for distributing
the incoming fluid to the inlet ~~shovel~~ <u>bladed</u> wheel 26. The
exhaust pipe 36, which in the shown embodiment extends through
the center of the rotor inlet, also directs the fluid flow
away from the center of the inlet.

Please replace the fourth full paragraph on page 8
with the following amended paragraph:

Fig. 2 shows a section A-A of the inlet ~~shovel~~
<u>bladed</u> wheel 26 with the ~~shovels~~ <u>blades</u> 24 attached to the
inner wall of the rotor 20 at its inlet end. The ~~shovels~~
<u>blades</u> 24 extend inwards towards the throttle plate 38 in the
center of the inlet 22. An arrow indicates the direction of

rotation of the rotor 20 and the ~~shovel~~ bladed wheel 26. The ~~shovels~~ blades 24 are arcuate in shape and extend in the direction of rotation leaving channels 25 for the fluid therebetween.

Please replace the paragraph spanning pages 8 and 9 with the following amended paragraph:

Fig. 3 shows the shape of the ~~shovels~~ blades 24 and the channels 25 along section C-C in Fig. 1. The shovels have a leading edge 27 extending towards the inlet pipe 14. The leading edge forms an angle a with a line parallel to the centerline of the rotor. The angle a of the lead- ing edge is advantageously designed so that the leading edge 27 will extend in the direc- tion of the relative inlet speed VDIFF OF THE fluid. The angle a is preferably between 45 and 70°. The relative inlet speed vdiff is the speed difference between the rotor speed vrot and and the bottom. The bottom of the pump 10 is shown as being rotatable with the rotor 20.

Please replace the first full paragraph on page 9 with the following amended paragraph:

The outlet edges 29 of the ~~shovels~~ blades 24 extend towards the inner wall of the rotor 20 and are directed so that they form an angle B with a line parallel to the centerline of the rotor 20. The angle B is preferably between 30 and 80°, more preferably between 40 and 70°. The ~~shovel~~

blade itself forms between leading edge 27 and outlet edge 29

a smooth arcuate ~~shovel~~ blade form.

Please replace the second full paragraph on page 9

with the following amended paragraph:

The curved and angled shape of the ~~shovels~~ blades 24

provides a means for directing incoming fluid towards the

rotating drum surface in a direction which has a substantial

peripheral component in addition to an axial component and at

a peripherical velocity which is greater than the peripherical

velocity of the rotating rotor at this position.

Please replace the third full paragraph on page 9

with the following amended paragraph:

Fig. 4 shows the outlet end of the pump 10 with its

turbine wheel 30 at section B-B of Fig. 1. The ~~shovels~~ blades

32 of the turbine wheel 30 form between themselves channels 33

which at their inlet ends are turned so that a fluid having a

peripheral velocity higher than that of the rotor 20 can

smoothly flow into the channels 33.

Please replace the first paragraph on page 10 with

the following amended paragraph:

During operation of the pump embodiment of Figs. 1

to 4, a fluid which is to be degassed and pumped flows through

the inlet pipe 14 and inlet channel 22 and is distributed by

the throttle plate 38 to the channels 25 of the rotating inlet

~~shovel~~ bladed wheel 26. The inlet flow velocity vin of the

fluid is determined by the inlet pressure. The direction of

the flow velocity forms an angle of substantially 90° AGAINST

the peripherical rotational velocity VROT of the ~~shovel~~ bladed

wheel 26. The velocity difference VDIFF between shovel wheel

and fluid will thus, according to the theorem of Pythagoras,

be equal to the square root of the sum of the squares of the

inlet flow velocity vin of the fluid and the rotational

velocity vrot of the rotor:

$$DIFF = VIN + VROT2$$

Please replace the third full paragraph on page 10

with the following amended paragraph:

Due to the shape of the ~~shovels~~ blades 24 the fluid

will flow along the drum wall with a velocity having a

peripherical component which is higher than the peripheral

velocity of the rotor. In other words, the fluid will rotate

at a speed which is higher than the speed of the drum.

Please replace the third paragraph on page 13 with

the following amended paragraph:

If the inlet velocity vin of the fluid is, for

instance, 10 m/s and the peripheral velocity of the ~~shovel~~

bladed wheel 26 is 15 m/s, the velocity difference is

$(102+152)$, i. e. 18 m/s. At an angle ß of 50°, the peripheral

velocity component is 13.8 m/s and the axial component 11.5

m/s. The total peripherical velocity is thus 15+13. 8=28.8 m/s and the total velocity of the fluid 30.8 m/s. The kinetic energy contained in the fluid corresponds to the mass flow (kg/s) x 30.82 i. e. 950 Ws/kg.

Please replace the first full paragraph on page 14 with the following amended paragraph:

In this embodiment the ~~shovels~~ blades 24 are located in the rotatable inlet 22 of the rotor 20. The arcuate accelerating ~~shovels~~ blades 24 are attached to the inner wall of the rotor inlet 22.

Please replace the third full paragraph on page 14 with the following amended paragraph:

The stationary blades 23 are arcuate in shape and form a stationary accelerator which deflects the fluid entering the inlet 14 from an axial direction towards a radial direction. The velocity of the deflected flow will be increased peripherically and the flow entering the rotating accelerator ~~shovels~~ blades 24 in the rotating inlet 22 will therefore have an increased peripherical velocity.

Please replace the fifth full paragraph on page 14 with the following amended paragraph:

The rotating fluid flow from the stationary accelerator will enter the rotating inlet 22 and its arcuate ~~shovel~~ blades 24 which form a rotating accelerator. The

rotating accelerator hits the fluid flow and turns the
velocity difference by its arcuate shape so that the fluid
starts to rotate with a speed higher than the rotor at this
position.

Please replace the first paragraph on page 15 with
the following amended paragraph:

The shape of the arcuate ~~shovels~~ blades 24
determines the relationship between axial and radial component
of the velocity of the fluid. Since the axial flow component
is basically not affected by the entry of the fluid into the
drum, the shovel design will determine the axial flow velocity
along the drum wall.

Please replace the second paragraph on page 15 with
the following amended paragraph:

Fig. 5 and Fig. 6 are provided with velocity vectors
explaining how the velocity of the fluid and rotor changes in
the various accelerating means. In Fig. 6 the stationary
accelerator blades 23 and the rotating accelerator ~~shovels~~
blades 24 are shown as contours merely.